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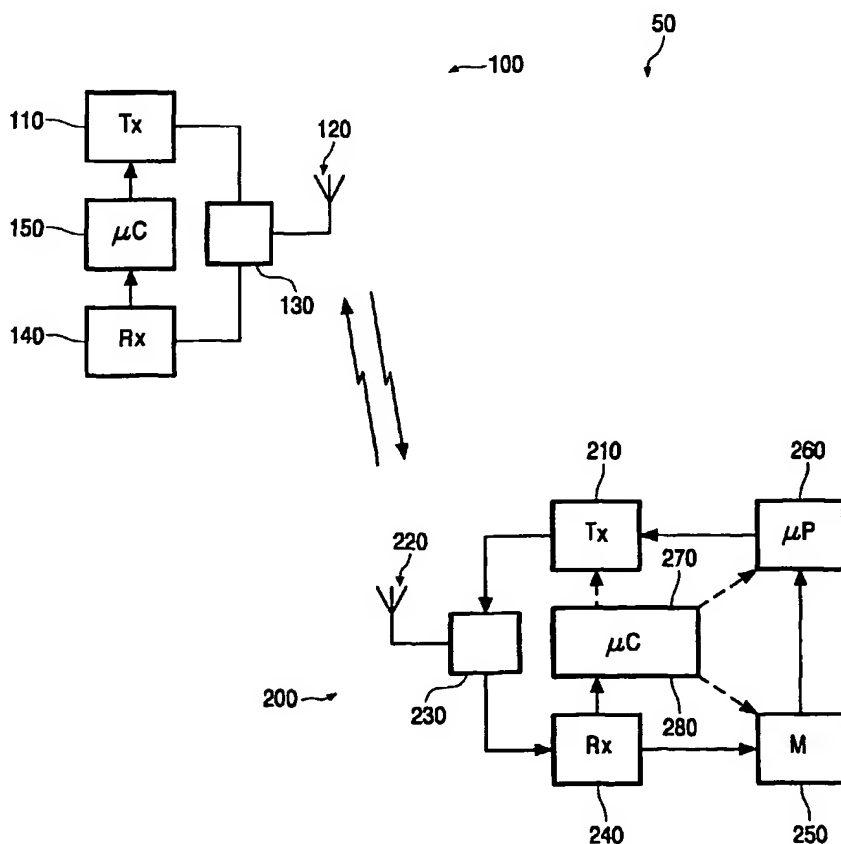
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[Continued on next page]

(54) Title: CLOSED-LOOP POWER CONTROLLED RADIO COMMUNICATION SYSTEM



(57) Abstract: In a radio communication system (50) employing closed loop power control a primary station (100) adjusts its transmit power in response to control information including power control commands received from a secondary station (200). If the primary station (100) fails to obey the power control commands the secondary station (200) modifies the control information and the primary station (100) uses the modified control information to adapt a characteristic of a transmission.

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SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Declaration under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA,

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INTERNATIONAL SEARCH REPORT

International Application No

P/IB2004/001534

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 H04B7/005 H04L1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99/65158 A (RAAF BERNHARD ; SIEMENS AG (DE)) 16 December 1999 (1999-12-16) page 2, line 20 - page 3, line 15 page 3, line 28 - page 4, line 3 page 5, line 28 - page 6, line 6 page 6, line 32 - page 7, line 5 page 8, line 1 - line 17 page 11, line 10 - page 13, line 4; figure 2 ----- -/--	1,2, 5-13, 16-19

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

International Application No

P/IB2004/001534

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>W0 01/43296 A (ERICSSON TELEFON AB L M) 14 June 2001 (2001-06-14)</p> <p>page 2, line 11 - page 3, line 3 page 3, line 13 - page 5, line 3; figure 3 page 12, line 12 - page 13, line 13 page 14, line 5 - page 15, last line page 18, line 8 - page 19, line 5</p> <p>-----</p>	<p>1,2, 5-13, 16-19</p>
A	<p>EP 1 079 541 A (CIT ALCATEL) 28 February 2001 (2001-02-28)</p> <p>paragraphs [0007] - [0009] paragraphs [0013], [0014] paragraph [0048]; figure 2</p> <p>-----</p>	<p>1,2, 5-13, 16-19</p>

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

P 1B2004/001534

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9965158	A	16-12-1999	WO 9965158 A1	16-12-1999
WO 0143296	A	14-06-2001	US 6735447 B1	11-05-2004
			AU 2240501 A	18-06-2001
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			JP 2001111482 A	20-04-2001
			US 6337989 B1	08-01-2002

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2004/001534

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1, 2, 5-13, 16-19

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1,2,5-13,16-19

Generating an indication of power step size in response to the primary station failing to adjust its transmit power.

2. claims: 3,4,14,15

Modifying channel quality reports in response to the primary station failing to adjust its transmit power.
